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EXAMINER

RUTTEN, JAMES D

ART UNIT	PAPER NUMBER
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2122

5

DATE MAILED: 05/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

224

Office Action Summary

Application No.

09/853,324

Applicant(s)

KALIAPPAN ET AL.

Examiner

J. Derek Rutten

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 May 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 1-37 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-37 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 August 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-37 have been examined.

Priority

2. Acknowledgment is made of applicant's claim for foreign priority based on an application filed in India on May 12, 2000. It is noted, however, that applicant has not filed a certified copy of the 510/Del/2000 application as required by 35 U.S.C. 119(b).

Drawings

3. The drawings are objected to because Figures 1, 2, 3, 4, and 7 contain grayscale shading, which would lead to poor reproduction quality. See 37 CFR 1.84 (I). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.
4. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the following items must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

- IP Address (claim 2)
- Serialization (claims 17, 22, etc.)
- Server/Database connection protocol and implementation (claim 22)
- Test generation independence from the API (claim 32)
- Execution of test program according to user input (claim 34)

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A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Objections

5. Claims 1, 2, 4, and 19 are objected to because of the following informalities: Claims should be one sentence and end with a period. Appropriate correction is required.
6. Claim 1 is objected to because of the following informalities: A typo in line 11 results in “centralize” which will be interpreted as --centralized--. Appropriate correction is required.
7. Claim 7 is objected to because of the following informalities: A typo in line 9 results in “on target” which will be interpreted as --on the target--. Appropriate correction is required.
8. Claim 29 is objected to because of the following informalities: A typo on page 30 line 4 results in “creating test scenario” which will be interpreted as --creating a test scenario--. Appropriate correction is required.
9. Claim 29 is objected to because of the following informalities: A typo on page 30 line 7 results in “generating test program” which will be interpreted as --generating a test program--. Appropriate correction is required.

Specification

10. The abstract of the disclosure is objected to because it appears to contain a typo in line 9 resulting in the phrase “storage means contains” which should be --storage means that contains--. Correction is required. See MPEP § 608.01(b).

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11. The use of the trademarks Java and JDBC has been noted in this application (page 9). They should be capitalized wherever they appear and be accompanied by the generic terminology.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.

Claim Rejections - 35 USC § 112

12. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

13. Claims 8, 11, 14, 15, 18-22, and 29-37 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

14. Claim 8 contains the trademarks/trade names "Aperios" and "Java". Where a trademark or trade name is used in a claim as a limitation to identify or describe a particular material or product, the claim does not comply with the requirements of 35 U.S.C. 112, second paragraph. See *Ex parte Simpson*, 218 USPQ 1020 (Bd. App. 1982). The claim scope is uncertain since the trademark or trade name cannot be used properly to identify any particular material or product. A trademark or trade name is used to identify a source of goods, and not the goods themselves. Thus, a trademark or trade name does not identify or describe the goods associated with the trademark or trade name. In the present case, the trademark/trade name "Aperios" is used to identify/describe a real-time operating system and, accordingly, the identification/description is

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indefinite. Also, the trademark/trade name “Java” is used to identify/describe an interpreted programming language runtime environment and, accordingly, the identification/description is indefinite.

15. Claim 11 recites the limitation "the test cases" in line 29. There is insufficient antecedent basis for this limitation in the claim. This limitation will be interpreted as ~~--the test cases--~~.

16. Claim 14 recites the limitation "the image" in line 15. There is insufficient antecedent basis for this limitation in the claim. This limitation will be interpreted as ~~--an image--~~.

17. Claim 15 recites the limitation "the said test driver module" in line 20. There is insufficient antecedent basis for this limitation in the claim. This limitation will be interpreted as ~~--a test driver module--~~.

18. Claim 18 contains the trademarks/trade name “Java”. In the present case, the trademark/trade name “Java” is used to identify/describe an object-oriented programming language and, accordingly, the identification/description is indefinite for the reasons set forth above.

19. Claims 19-21 are rejected for being dependent upon a rejected parent claim.

20. Claim 22 contains the trademarks/trade names “JDBC”, and “Java”. In the present case, the trademark/trade name “JDBC” is used to identify/describe an application programming interface for database access and, accordingly, the identification/description is indefinite. Also, the trademark/trade name “Java” is used to identify/describe an object-oriented programming language and, accordingly, the identification/description is indefinite.

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21. Claim 29 recites the limitation "the stored meta-information" in lines 3 and 4 appearing on page 29. There is insufficient antecedent basis for this limitation in the claim. This limitation will be interpreted as --~~the~~ stored meta-information--.

22. Claim 29 recites the limitation "said meta-information" on page 30 line 3. It is not clear if this refers to the "obtained" or the "stored" meta-information. This limitation will be interpreted as --said obtained meta-information--.

23. Claim 29 recites the limitation "the designed test scenario" in lines 4 and 5 appearing on page 30. There is insufficient antecedent basis for this limitation in the claim. This limitation will be interpreted as --the created test scenario--.

24. Claim 29 recites the limitation "the test image" in line 9 appearing on page 30. There is insufficient antecedent basis for this limitation in the claim. This limitation will be interpreted as --a test image--.

25. Claim 29 recites the limitation "the reports" in line 14 appearing on page 30. There is insufficient antecedent basis for this limitation in the claim. This limitation will be interpreted as --~~the~~ reports--.

26. Claims 30-37 are rejected for being dependent upon a rejected parent claim.

Claim Rejections - 35 USC § 102

27. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an

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international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

28. Claims 1-9, 15, 17-21, 23, 24, 26-33, and 35-37 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent 6,510,402 to Logan.

As per claim 1, Logan discloses:

An automatic test system for testing remote target applications on a communication network (FIG. 1) comprising:

- *test generation means for executing the testing* (column 7 lines 24-27: “In accordance with a further embodiment of the present invention, an automatic test case code generator is utilized to reduce the amount of manual coding required to develop each individual test case within a given test suite.”),
- *the said means is connected to the following elements through the said communication network (FIG. 1):*
 - a. *a data storage means for holding the information about the testable items, the scenarios for those testable items and the results of the testing performed* (FIG. 1 elements 202 and 214; also column 4 line 30: “The results of the testing are then stored in the **DB server** 214...” and column 7 lines 1-7: “Further, the present invention utilizes a **central repository of production**

test suites in the ITE server 202. The test suites are loaded from the repository, at run time, to perform regression testing... ”),

- b. an image builder means for providing a centralized image building facility* (column 7 lines 1-4 as cited above; also 7-10: “When test suite code is being developed or revised, it is copied onto an ITE client machine 206 and is then **modified and executed** using the client version, not the server version of the code.” Comment: The central repository stores and provides production test suites to the client which builds the code.), *and*
- c. a target application executing on a target device* (column 4 lines 51-58: “The ITE client 206 then issues test suite staging requests to the ITE server 202 (step 306). The ITE server 202 fetches the compressed partition on behalf of the client from the partition server 204 based on the test suite staging requests (step 308). The appropriate partitions are then extracted from the partition server 204 and copied to

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the ITE client 206. The **ITE client 206 then runs the test suite** (step 310).”).

As per claim 2, the above rejection of claim 1 is incorporated. Further, Logan discloses: *wherein the said elements are identified with an IP-address* (column 3 lines 17-22 describe utilization of JDK 1.1, and in particular the incorporation of Internet standards including IP. The JDK 1.1 inherently provides location of network elements using an IP address. See “Java™ Platform 1.1 Core API Specification” package java.net, and Class java.net.InetAddress).

As per claim 3, the above rejection of claim 1 is incorporated. Further, Logan discloses: *wherein the said test generation means, data storage means, image builder means and target applications are software means* (column 3 lines 17-25).

As per claim 4, the above rejection of claim 1 is incorporated. Further, Logan discloses: *wherein the test generation means, data storage means and an image builder means are executed either on a single computing system or on a plurality of computing systems* (FIG. 1).

As per claim 5, the above rejection of claim 1 is incorporated. Further, Logan discloses: *wherein said test generation means contains reflection objects for downloading*

to said target application through said communication network for obtaining meta-information in respect of target application (column 7 lines 41-51).

As per claim 6, the above rejection of claim 1 is incorporated. Further, Logan discloses: *wherein said target application includes a downloading means for installing reflection objects received from said test generation means (column 4 lines 39-45).*

As per claim 7, the above rejection of claim 1 is incorporated. Further, Logan discloses: *wherein said target application on the target device contains reflection objects for downloading meta-information to said test generation means through said communication network (column 4 lines 39-45 and column 7 lines 41-51).*

As per claim 8, the above rejection of claim 1 is incorporated. Further, Logan discloses: *wherein said target application operates under an environment which supports reflection viz. the Aperios operating system (Sony's Realtime OS) or is in Java (column 7 lines 41-51).*

As per claim 9, the above rejection of claim 1 is incorporated. Further, Logan discloses: *wherein said test generation means also includes a means for generating test cases independently of API or methods for which the test cases are generated (column 7 lines 51-54).*

As per claim 15, the above rejection of claim 1 is incorporated. Further, Logan discloses: *wherein the image builder means is a software executing on a computing system, which converts the test program received from a test driver module in description language to an image form suitable for loading and executing on the said target application* (column 3 lines 16-22 describes development using the Java Development Kit, and the description language is the Java programming language. The JDK further inherently provides a compiler for converting such a description language to a form suitable for loading and executing on a target. Also column 8 lines 40-43 disclose a test driver.).

As per claim 17, the above rejection of claim 1 is incorporated. Further, Logan discloses: *wherein the said data storage means is a software executing on a computing system for storing information relating to test scenario, test technique, object details, results of tests* (column 4 line 30 and column 7 lines 1-7) *and incorporates object serialization means in order to improve time for execution and improve security* (column 4 lines 38-41 discusses use of RMI which inherently uses serialization.).

As per claim 18, the above rejection of claim 1 is incorporated. Further, Logan discloses: *wherein said test generation means is developed in Java making it hardware and software independent and the test program generated is in DL (description language)* (column 3 lines 16-22 describes development using the Java Development Kit, and the description language is the Java programming language.).

As per claim 19, the above rejection of claim 18 is incorporated. Further, Logan discloses: *wherein said description language is Standard Description Language (SDL)* (SDL is interpreted to refer to the Java programming language according to the Java Platform 1.1 standard).

As per claim 20, the above rejection of claim 18 is incorporated. Further, Logan discloses: *wherein the said description language is converted by an appropriate language code converter to the desired test language* (Java programming language source code must inherently be converted to Java byte code before it can be executed. Execution of code is disclosed in column 7 lines 7-10).

As per claim 21, the above rejection of claim 20 is incorporated. Further, Logan discloses: *wherein the said code converter to convert the description language test program to the desired language test program is provided either at test driver module of the said test generation means or at the image builder means* (column 7 lines 7-10 inherently provides a code converter for converting edited source code to executable byte code).

As per claim 23, the above rejection of claim 1 is incorporated. Further, Logan discloses: *wherein the image builder means consists of an appropriate compiler and linker to generate an executable data image* (Java programming language source code

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must inherently be compiled and linked to Java byte code before it can be executed.

Execution of code is disclosed in column 7 lines 7-10).

As per claim 24, the above rejection of claim 1 is incorporated. Further, Logan discloses: *wherein the said test generation means further includes a means for simultaneously testing a plurality of target applications at one location or at multiple locations* (FIG. 1 elements 206; column 6 lines 63-64).

As per claim 26, the above rejection of claim 1 is incorporated. Further, Logan discloses: *wherein the said communication network comprising LAN, IEEE 1394 network or internet, wireless communication network, FTTH (Fiber To The Home), CATV, or xDigital Subscriber Line (xDSL)* (FIG. 1; column 3 lines 32-34).

As per claim 27, the above rejection of claim 1 is incorporated. Further, Logan discloses: *wherein the target application is a set of software* (column 2 lines 19-27).

As per claim 28, the above rejection of claim 1 is incorporated. Further, Logan discloses: *wherein the said target device is used for running one or more target applications* (column 4 lines 26-32).

As per claim 29, Logan discloses:

A method for testing remote target applications (column 11 line 61 – column 12 line 57) comprising the steps of:

- *obtaining meta-information details of the target application (column 7 lines 41-51 as cited above),*
- *checking the said meta-information against stored meta-information (column 7 lines 10-13: “In other words, the repository of test suites is managed like a **code repository** with the only difference being that the runtime hook determines if the test suite should be fetched locally or from the remote repository.”*
Comments: Code repositories operate by checking differences of stored code.),
- *updating the stored meta-information in case of discrepancy or absence of the obtained meta-information (column 7 lines 10-13 as cited above discloses repository behavior which updates storage when differences are found.),*
- *automatically generating test cases based on said obtained meta-information (column 7 lines 34-39: “...the present invention utilizes a **test case code generator** software program within the ITE clients 206, as described with reference to FIG. 5, to generate a basic core API test skeleton program that*

- systematically exposes all protected methods, constructors and attributes, and makes calls to all methods contained in a subject class.”),
- *creating a test scenario and generating test cases from the created test scenario* (column 7 lines 51-54: “The test case code generator portion of the ITE client 206 suitably performs **automatic test case generation based on return type** when possible, as well as trapping exceptions.”),
 - *adding or modifying the said test cases by user input* (column 8 lines 23-26: “**Interactive tests** refer to those tests where feedback is required, e.g., ‘Do you see a bar graph now?’, with the identification of proper functioning determined by the interactive feedback provided.”),
 - *automatically generating a test program using the test scenario and the test cases* (column 8 lines 2-6: “Thus, a skeleton **test suite program is generated** (step 404) that can then be individualized for specific test cases of the component and integrates into the testing execution framework to automatically **execute each**

test case and post test results to the common repository.”),

- *building a test image from the said test program* (column 7 lines 7-10: “When test suite code is being developed or revised, it is copied onto an ITE client machine 206 and is then **modified and executed** using the client version, not the server version of the code.” Comment: Modification and execution inherently provides building the image. Without building, the modifications would be unable to execute since they would remain in text form instead of machine executable form.),
- *downloading said test image to said target application for testing* (column 7 lines 1-4: “Further, the present invention utilizes a central repository of production test suites in the ITE server 202. The **test suites are loaded from the repository**, at run time, to perform regression testing”),
- *getting information from the user (test engineer) with regard to the order of execution, repetition and resetting of target application* (column 4 lines 45-47: “Once the ITE client 206 is logged on to the ITE server 202, the **desired partition** and associated test suites for performing the test

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are **selected** (step 304).” Comment: Selection is performed by a user; also column 7 lines 2-7: “The test suites are loaded from the repository, at run time, to perform regression testing (i.e., **repeating** an established suite of tests to make sure there are no unintended changes in the behavior of the software induced by the addition of new features or fixes).”),

- *automatically testing the target application* (column 8 lines 19-23: “Thus, background tests include those where the expected outcome of the test is known, so that a simple comparison between the expected outcome and the actual outcome can be **performed in the background** to test for proper functioning.”),
- *generating the reports from the test results in a required format* (column 4 lines 30-32: “The results of the testing are then stored in the DB server 214 and **reported to the ITE client** 206 by the Web server 216 (step 226).”).

As per claim 30, the above rejection of claim 29 is incorporated. Logan further discloses: *wherein the meta-information details of the target application are obtained using the reflection principle either by the use of reflection object bundled with the target*

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application or by downloading the reflection object to the target application (column 7 lines 41-51).

As per claim 31, the above rejection of claim 29 is incorporated. Logan further discloses: *wherein the test scenarios, test programs and test image are generated using object serialization in order to improve security of data communication over the network as well as to improve the utilization of resources in the network in order to reduce time for execution (column 39-42 discloses use of RMI which inherently uses serialization for network transfer).*

As per claim 32, the above rejection of claim 29 is incorporated. Logan further discloses: *wherein the said test programs are generated independent of the API or the method for which they are applicable (column 7 lines 51-54 discloses generation based on return types).*

As per claim 33, the above rejection of claim 29 is incorporated. Logan further discloses: *wherein the said test program is generated by:*

- *providing the framework to define the test scenarios using said meta-information (column 3 line 63 – line 65),*
- *generating different possible test cases automatically using said test scenarios (column 7 lines 41-46),*

- *generating the test program in a description language using said test scenarios and test cases* (column 7 lines 24-27 describes a test suite made of test cases which are developed from test scenarios. Further, column 3 lines 17-22 describe implementation using the Java programming language.).

As per claim 35, the above rejection of claim 29 is incorporated. Logan further discloses: *wherein the reports are generated for the specified test scenarios* (column 4 lines 30-32).

As per claim 36, the above rejection of claim 29 is incorporated. Logan further discloses: *wherein the solution is provided to a service station for testing the target application or the said service station is able to use the said automatic test system through a terminal provided at the service station* (column 4 lines 51-58).

As per claim 37, the above rejection of claim 29 is incorporated. Logan further discloses: *wherein a plurality of target applications can be simultaneously tested either at one location or at multiple locations* (FIG. 1 elements 206 depicts testing at multiple locations).

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29. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

30. Claims 10-14, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Logan as applied to claim 1 above, and further in view of "Principles of Object-Oriented Analysis and Design" by Martin.

As per claim 10, the above rejection of claim 1 is incorporated. Further, Logan discloses: *configuration* (column 5 line 64 – column 6 line 59), *test design* (column 8 lines 40-42), *test driver* (column 7 line 24-27), *test execution* (column 4 lines 51-58), and *reports* (column 11 lines 16-20), *all connected to data storage through a network* (FIG. 1). Logan does not expressly disclose the organization of functionality into separate specific modules.

However, in an analogous environment, Martin teaches object-oriented (OO) software design which promotes software modules based on object types (page 5 paragraph 2).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to develop Logan's test system using Martin's software modules. One of ordinary skill would have been motivated to represent the functionality of a system in discrete modules that provide a clear conceptual model of a system to promote reliability, flexibility, and ease of change.

As per claim 11, the above rejection of claim 10 is incorporated. Further, Logan discloses: *wherein the configuration module is a software executing on a computing system, which obtains information on test techniques, object details and data type details from the user for defining test cases* (column 5 line 64 – column 6 line 59).

As per claim 12, the above rejection of claim 10 is incorporated. Further, Logan discloses: *wherein the test design module is a software executing on a computing system which provides the test scenario framework to create test scenarios and the information stored in said data storage means* (column 8 lines 40-42).

As per claim 13, the above rejection of claim 10 is incorporated. Further, Logan discloses: *wherein the test driver module is a software executing on computing system, which automatically generates the test cases and then the test programs in a description language using the test scenario provided by the said test design module and the information in said data storage means* (column 7 line 24-27).

As per claim 14, the above rejection of claim 10 is incorporated. Further, Logan discloses: *wherein the test execution module loads an image created by the said image builder module on said target application and monitors and controls the execution of image on said target application* (column 4 lines 51-58).

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As per claim 16, the above rejection of claim 10 is incorporated. Further, Logan discloses: *wherein the said report module is a software executing on a computing system for generating reports from the results of the testing on the target application, which are stored in the said data storage means* (column 11 lines 16-20).

31. Claim 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Logan as applied to claim 1 above, and further in view of “JDBC Guide: Getting Started” by Sun Microsystems (hereinafter referred to as “JDBC”).

As per claim 22, the above rejection of claim 1 is incorporated. Further, Logan discloses: *wherein the said data storage means is a server and is developed in Java making it hardware and software independent using object serialization for communication* (column 3 lines 16-25; also FIG. 1 elements 214, column 3 lines 34-42; also column 4 lines 38-41). Logan does not expressly disclose database specifics.

However, in an analogous environment, JDBC teaches *ODBC / JDBC and is not dependent on any particular database* (Section 1.1 paragraph 2, also Section 1.1.3 paragraph 2).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement Logan’s database access using JDBC’s database interface. One of ordinary skill would have been motivated to develop a platform independent database application so as to “write it once and run it anywhere”.

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32. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Logan as applied to claim 1 above, and further in view of U.S. Patent 5,919,258 to Kayashima et al. (hereinafter referred to as "Kayashima").

As per claim 25, the above rejection of claim 1 is incorporated. Further, Logan does not expressly disclose the use of a firewall between elements of the communication network.

However, in an analogous environment, Kayashima teaches the use of a firewall to control communication access (Fig. 1; also column 1 lines 34-38).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement Logan's network using a firewall between elements. One of ordinary skill would have been motivated to limit the IP address which can access the resources for each service.

33. Claim 34 is rejected under 35 U.S.C. 103(a) as being unpatentable over Logan.

As per claim 34, the above rejection of claim 29 is incorporated. Logan does not expressly disclose: *wherein the execution of the test programs is conducted using the order of execution, the repetition, the requirement for resetting and batch information by user input.*

It would have been obvious to one of ordinary skill in the art at the time the invention was made to perform execution of the test program as input by the user. One of

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ordinary skill would have been motivated to provide a system of execution that follows the instructions of the user so that predictable, desired results can be obtained.


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to J. Derek Rutten whose telephone number is (703) 605-5233. The examiner can normally be reached on M-F 6:30-3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Q. Dam can be reached on (703) 305-4552. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

jdr



TUAN DAM
SUPERVISORY PATENT EXAMINER